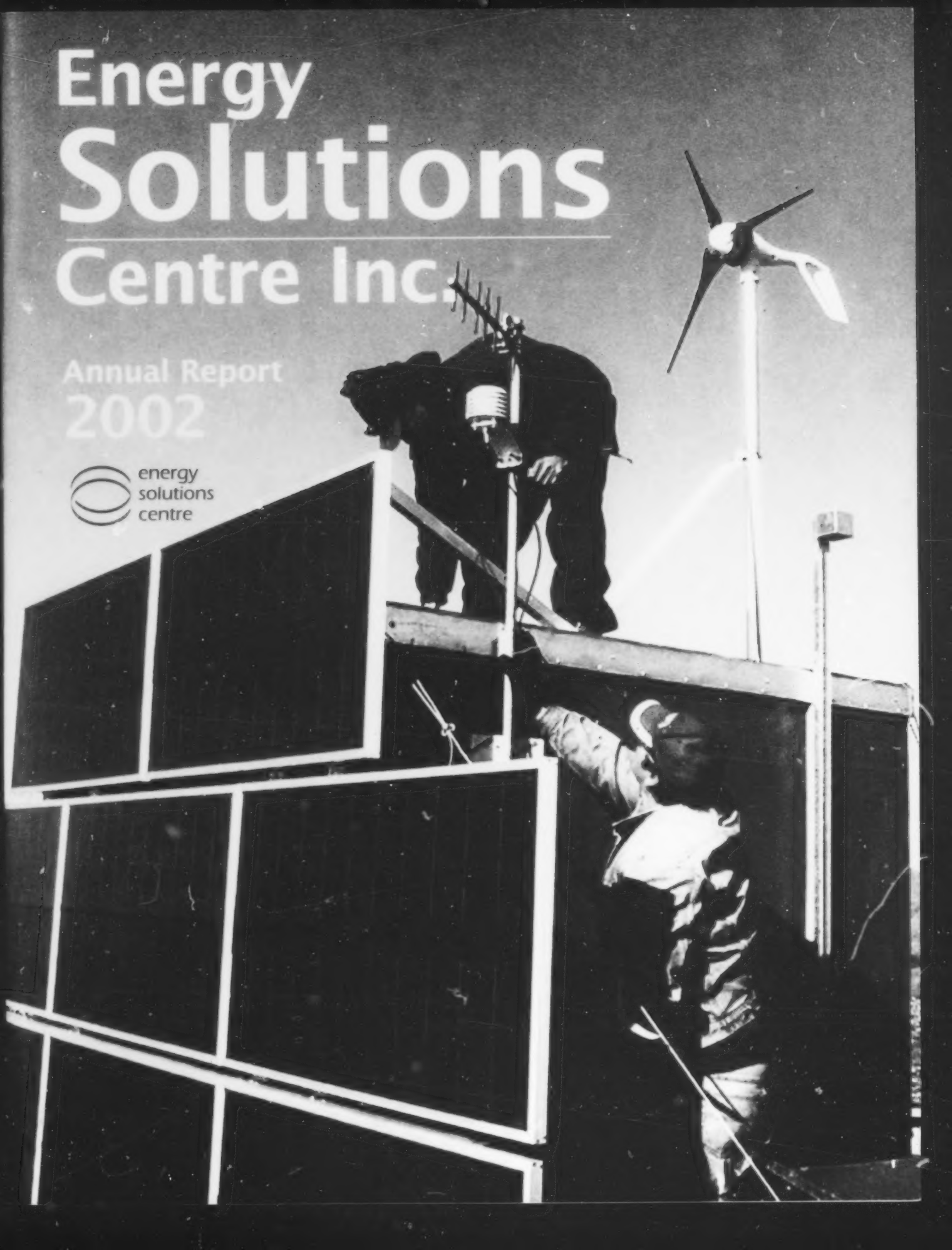
Energy Solutions Centre Inc.

Annual Report 2002

energy solutions centre



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energy solutions centre

June 30, 2003

David Morrison
Chair
Yukon Development Corporation
206A Lowe Street
Whitehorse, Yukon Y1A 1W6

Mr. Morrison:

On behalf of the board of directors and management, I am pleased to submit the 2002 Annual Report for the Energy Solutions Centre Inc.

Working with many partners in the private and public sectors, the Centre is proving its worth in stimulating action by households, businesses, First Nations, municipal and public governments to take advantage of home-grown energy solutions.

Together we are reducing the cost of living and doing business in the Yukon, while spawning new economic activity, developing technical capacity and achieving environmental benefits.

Respectfully,

Fredrick Blanchard

Fred Blanchard
Acting Chair

Contents

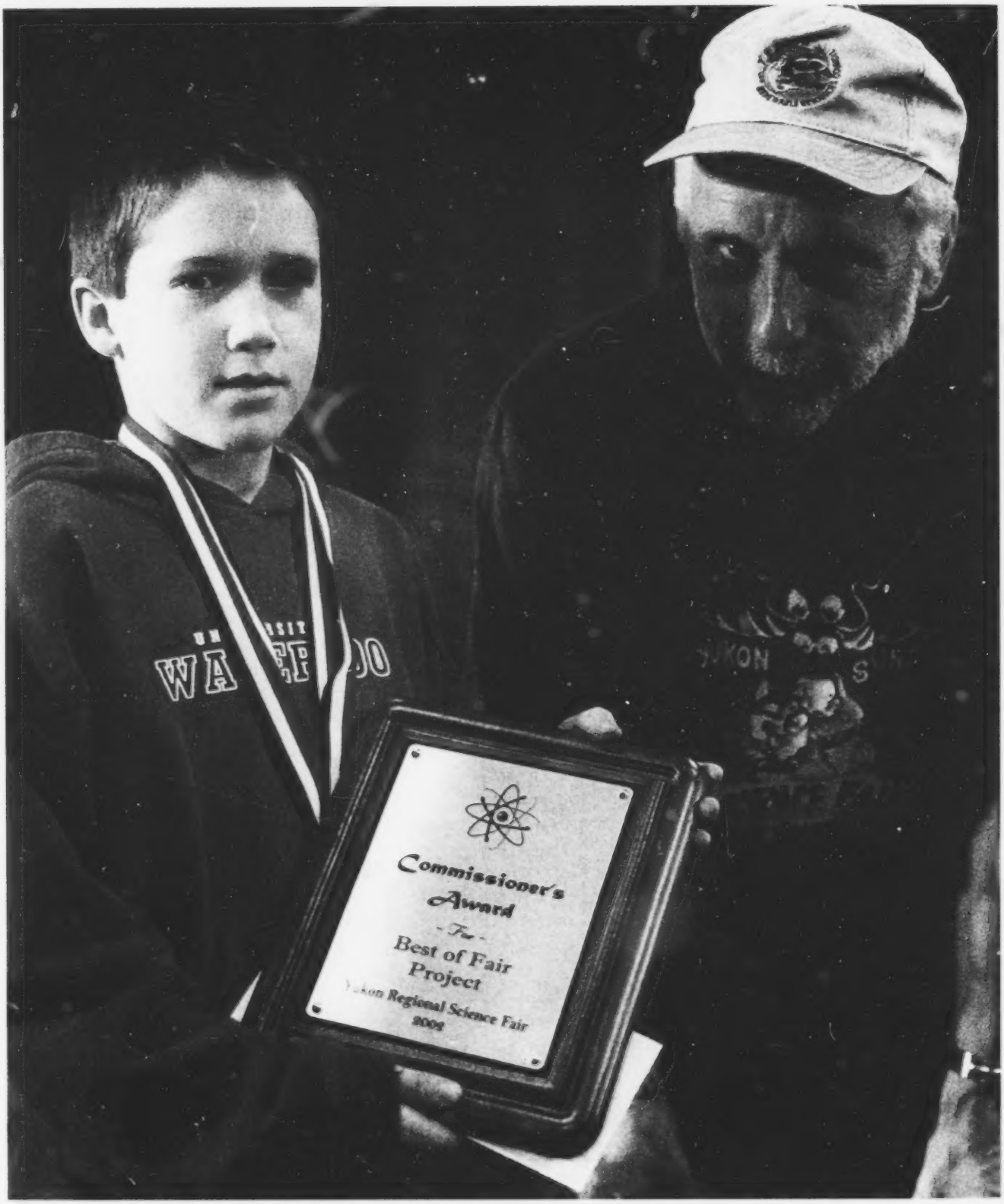
CORPORATE PROFILE. 1

2002 YEAR IN REVIEW. 7

BOARD OF DIRECTORS & STAFF. 27

AUDITED FINANCIAL STATEMENTS. 31

PHOTOGRAPH CREDITS. 40


Commissioner's
Award
- For -
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2002

COMPANY PROFILE

The Energy Solutions Centre Inc., incorporated under the *Business Corporations Act*, is a wholly owned subsidiary of Yukon Development Corporation, a crown corporation of the Yukon government.

The centre is a joint initiative between Yukon Development Corporation and Natural Resources Canada. It strives to set the circumpolar standard for cost-effective, renewable and integrated energy services, environmental stewardship, and northern innovation in the energy sector. This vision is accomplished by consolidating federal and territorial energy resources, and forging partnerships with the private and public sectors to conduct projects that result in energy cost-savings and reduced greenhouse gas emissions.

The centre's objective is to engage the Yukon public to take action and to take advantage of its programs and technical services. Not only does this produce integrated energy solutions for clients, but it causes a market shift towards sustainable building design, lowers energy demand, and substitutes renewable energy for fossil fuels. The centre also provides targeted training to enhance capacity within the local energy sector, conducts research on emerging energy efficient and renewable energy technologies, and enhances public awareness through activities related to climate change.

Pursuant to the Canada/ Yukon Letter of Cooperation on Energy Efficiency and Renewable Energy, the centre is partly supported by a funding agreement between Yukon Development Corporation and Natural Resources Canada.

CORPORATE STRUCTURE AND ACCOUNTABILITY

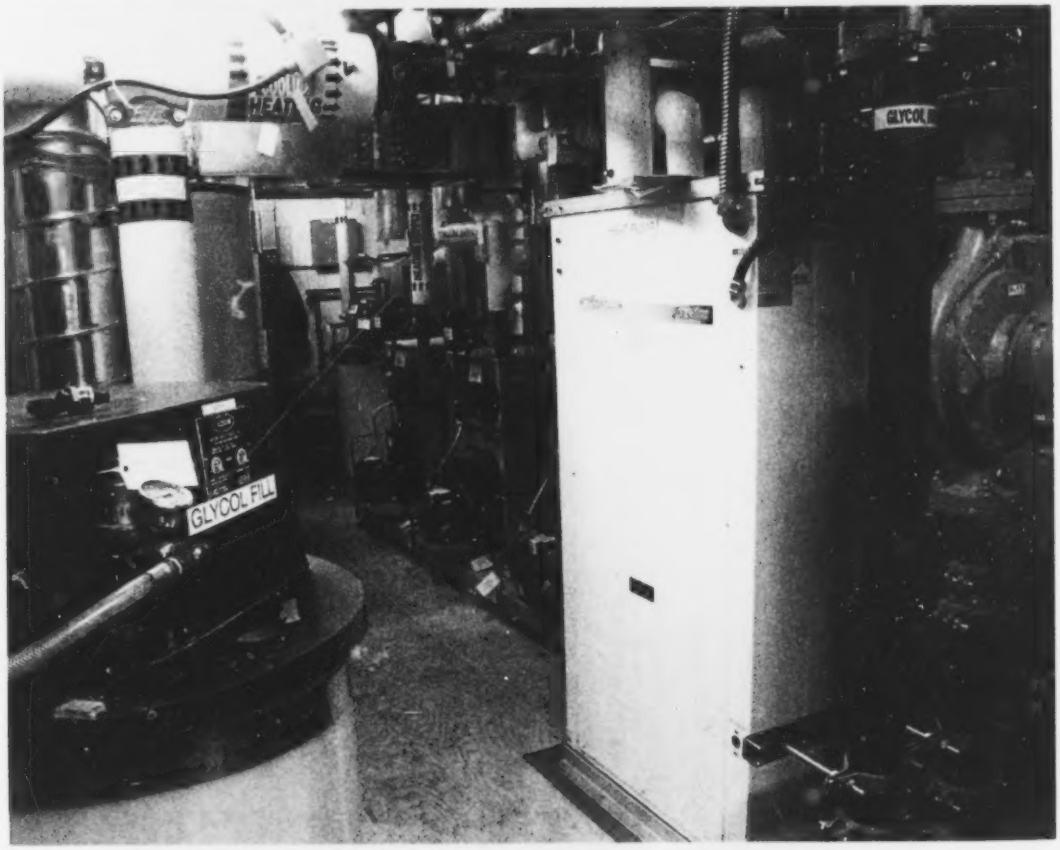
Energy Solutions Centre Inc. is governed by a board of up to five directors appointed by Yukon Development, including the president ex officio.

With input and advice from Natural Resources Canada and territorial agencies, the board reviews and approves a business plan each year that establishes the priorities and initiatives for the centre and builds on the energy policy objectives of Yukon Development Corporation and its sole shareholder, the Yukon government. Corporate performance is monitored through regular meetings of the board.

The managing director of the centre leads the coordination, administration and implementation of programs and services consistent with the annual business plan and board direction. The director is assisted by consultants and contractors who provide technical assistance and outreach for initiatives by collaborating with government departments and agencies, non-government and industry organizations, municipalities and the private sector.

In the on-going effort to focus on results, the centre has developed Key Performance Indicators (KPIs) to measure the energy-related, environmental and economic progress of significant activities. KPIs provide critical baseline data for evaluating the success of initiatives and identifying those areas needing improvement. KPIs were phased in over the past year with comprehensive results reporting scheduled for 2003.

Beyond these accountability mechanisms, the centre files quarterly and annual reports with its parent, Yukon Development Corporation, and major partner, Natural Resources Canada.

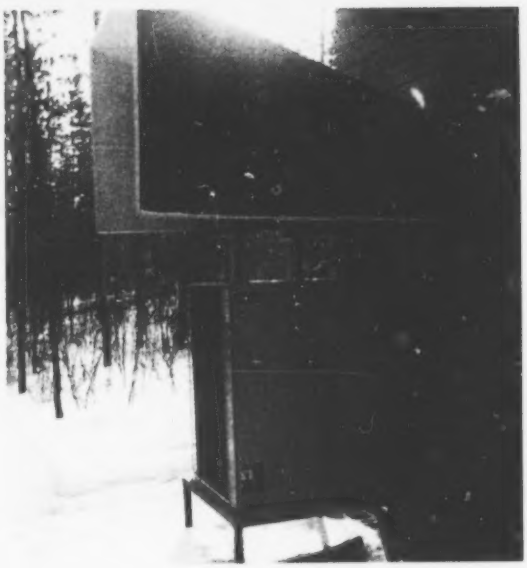


IT'S ALL ABOUT SCALE

About 30,000 people live in the Yukon, an area larger than the combined landmasses of Germany, Netherlands and Belgium. The majority of the population lives in the Whitehorse area, while fewer than 10,000 people live in the territory's 17 other communities.

The Yukon relies heavily on imported goods, many of which are transported more than 2,000 kilometres from the nearest major cities in British Columbia and Alberta. Given the distance and small market, the territory is last on the supply chain and not a priority for many distributors. These constraints mean that it can be difficult to secure new or specialty items, as well as technical expertise for ongoing support and maintenance.

This dependence on imported products increases the cost of living. Whitehorse residents pay prices that average between 9.3% and 25.1% higher than in Vancouver and Edmonton, respectively. Yukoners depend more on fossil fuels for heating and electricity generation than most other Canadians because of the sub-arctic climate. In addition, they require more fuel to transport goods to and from the territory, as well as between communities.



The Yukon enjoys an abundance of renewable energy sources, including water, wood, solar and wind, but development has been hindered by the territory's small market, remoteness, and lack of technical capacity. Establishing new, primary power supplies from renewable sources is often economic only on a large scale when access to a stable, large market is assured. These conditions do not exist in the territory because of the low population, economic volatility caused by fluctuating commodity prices and isolation from the North American electrical grid.

The territory's power infrastructure was originally designed to accommodate large mining operations. Over the past decade, Yukon consumers faced rising electricity bills when these customers ceased operations. This left Yukon Energy with surplus capacity and lower revenues, and the fixed costs were passed on to remaining consumers.

Developing small, renewable energy sources for off-grid applications or for displacing diesel-generated electricity has been a challenge due to a lack of technical capacity, and financial, regulatory and economic factors. Frequently, renewable technology must be adapted to the harsh, sub-arctic climate and then properly maintained to ensure operational efficiency and longevity.

A long legacy of poor building processes has added another barrier to improved energy performance. During the boom periods of the Klondike gold rush and the construction of the Alaska Highway during World War II, structures were often erected quickly, without regard for the climate, permafrost or topography. Many Yukon buildings date back to the 1960s and 1970s, a time of rapid economic expansion. They were based on southern design and construction standards, and, as a result, have high energy and maintenance costs.

This trend continues, particularly in the commercial sector, as national chains tend to replicate southern designs and choose energy sources and heating and cooling equipment that are not always suitable for the local climate. Over the past 20 years, standards have improved in the residential sector, and newer homes have more insulation, better window designs and improved vapour barriers. However, houses are also larger, so energy use remains an important issue for many residents.

And finally, climate change is already creating immediate effects in northern Canada. Average temperatures are rising faster and with greater magnitude in the north than in the south, leading many to believe that the impacts of those changes will be more severe in northern than in southern jurisdictions.

Fortunately, a great deal of information has been compiled on the territorial energy market. For example, Yukon Housing Corporation completed a housing study in 2000, Yukon Development Corporation conducted a household consumer end-use survey in 2001 that was complemented by a household expenditure survey by Statistics Canada, and the centre has collected data on energy use in public buildings. These two surveys will be complemented by an off-grid energy assessment

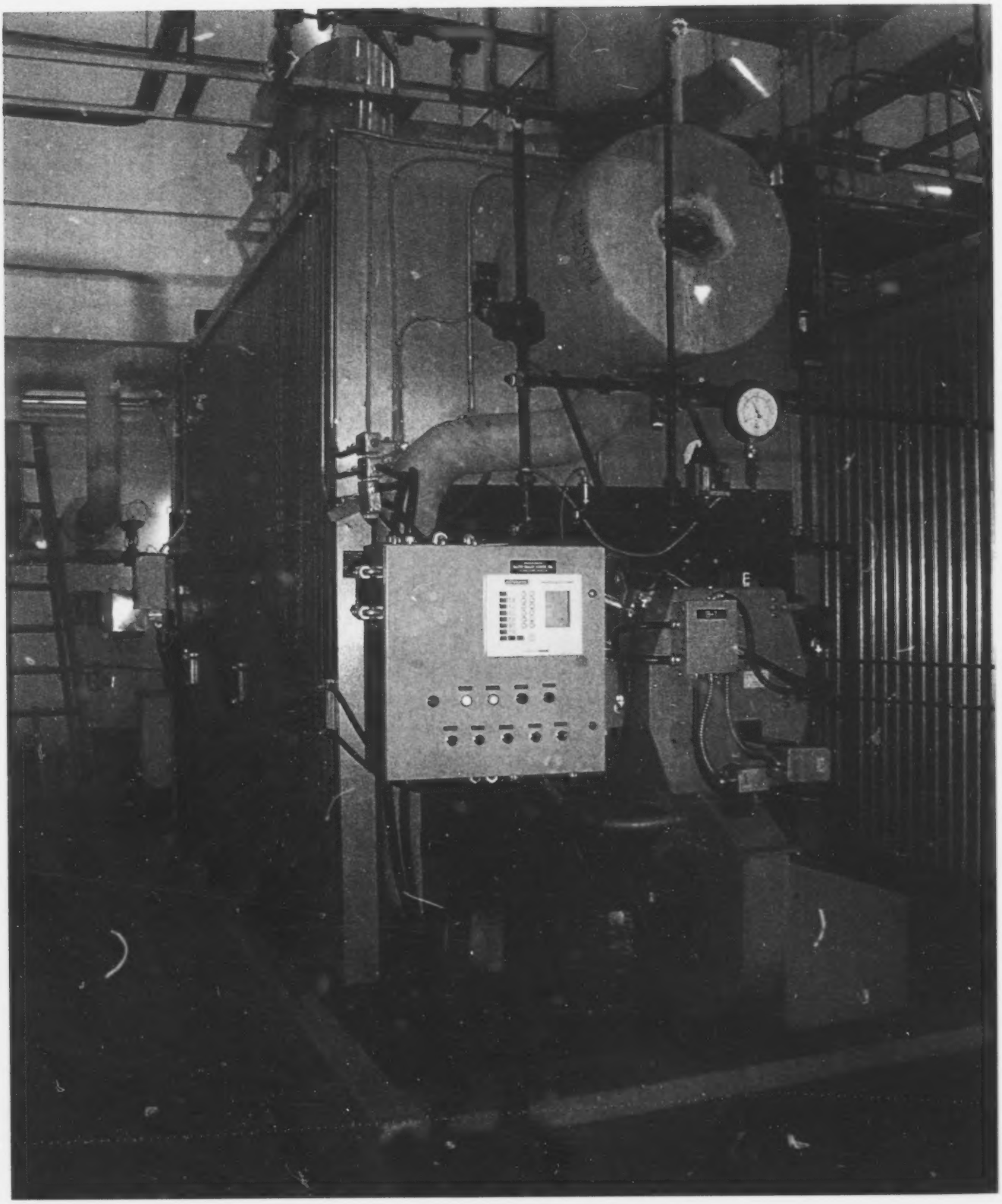
and Yukon business survey during 2003. These surveys provide essential baseline information on the opportunities within the local energy market.

Given this context, the Energy Solutions Centre has developed a series of Yukon-specific initiatives to improve energy efficiency, and displace or reduce the territory's reliance on fossil fuels by using renewable sources for heating and electricity generation. The centre's activities are also about improving overall energy management. This can involve demand-side management, which can reduce the need for diesel generation of electricity. Examples of this are the 2002 Fridge Exchange Program, the House Calls Energy Efficiency Program, and improving building design, as seen through the green building design competition. There are also opportunities to increase the use of renewable hydropower during periods of seasonal surplus in hydro generation zones, to achieve energy cost savings and reduce greenhouse gas emissions. Examples that address this opportunity are the programs and services such as the Renewable Power Sales Incentive Program and integrated energy solutions.

The value of the centre lies in its unique ability to adapt, innovate, pool and leverage technical and financial resources from the community, utilities, and public and private sectors. Since the barriers to integrated energy solutions in the Yukon are similar to those of other rural and remote communities, the centre's successes hold the potential to be replicated across the country.

Promotion, education, training and financial incentives are all used to encourage participation in the centre's programs. The long-term goal is to transform the local market so that integrated energy solutions become standard, rather than unusual choices.

By catalyzing more efficient use of energy and the use of renewable technologies, the centre produces a wide range of benefits. Consumers save money on their monthly bills, live in more comfortable environments and enjoy better air quality. Local contractors receive training in the new technologies, and the installation of energy efficient and renewable energy products helps to stimulate economic activity. And finally, greenhouse gas emissions are reduced.



2002 YEAR IN REVIEW

BUILDING OUR BUSINESS

The Energy Solutions Centre believes that the way in which it conducts business is just as important as the activities it pursues. The centre's interaction with clients, partners and the public defines who it is and the values that it embraces. In its drive for excellence, the centre responds to the needs and expectations of customers, maximizes the local benefits of its operations, demonstrates environmental stewardship, and fosters innovation and prudent risk-taking.

The Energy Solutions Centre accomplishes these tasks through strong fiscal management and partnership with the Yukon's private sector as well as federal, First Nation, territorial and local governments. Its core business includes an array of contract-repayable technical services for audits and integrated energy solutions, and brokering access to federal and territorial energy programs. Where necessary, clients are encouraged to implement recommended energy solutions by using low-cost financing offered by the centre through leases and loans.

The centre also works with particular sectors, such as the Yukon tourism industry, to accelerate the implementation of energy cost-saving solutions and reduction of greenhouse gas emissions.

The door is open

The storefront location of the Energy Solutions Centre has proven its value. Located in downtown Whitehorse, the ground floor offices are highly visible and encourage walk-in clients. The offices are also easily accessible for people with disabilities.

An extensive resource library located in the foyer is open to the public. It contains

information about federal and territorial energy initiatives, efficiency and renewable energy technologies, and climate change. A computer with high-speed internet access assists with information searches while the Energy Solutions Centre website (www.nrgsc.yk.ca) offers material on programs and services, and helpful links to other energy resources.

Walking the talk

The Energy Solutions Centre is committed to spending its money in the Yukon whenever possible and reducing greenhouse gas emissions in all operations.

From desks to bookshelves, the office is equipped with locally made office furniture, and more than 90% of the centre's purchases are from Yukon businesses. Almost all the contractors used to design, deliver or implement programs and services are Yukon-based.

The centre's commitment to energy conservation is apparent even before one walks in the front door. In 2002, planning began for a Solarwall to be installed on the south side of the building. The centre's Toyota Prius is the second hybrid vehicle to be tested in the Yukon.

Some of the energy saving measures are less obvious, such as a thermostat timer that reduces heat use and a motion sensor light that decreases power consumption in the office equipment room. Consultants and employees are encouraged to conserve electricity by optimizing natural light, minimizing the need for lighting in unoccupied areas and turning off computers and other office equipment not in use.

Through the Yukon Development Corporation's Renewable Power Sales Incentive Program, the centre arranged for the landlord to install an electric boiler and use surplus hydroelectricity to heat the building rather than fossil fuels. This change reduces greenhouse gasses and saves money for the property owner since the surplus hydroelectricity costs less than propane or oil.

Both e-work and bike commuting are actively supported along with a well-established recycling program. Also, the centre was pleased to contribute again to Yukon Development Corporation's action plan submitted to the Voluntary Challenge and Registry Inc. for tracking, reporting and reducing greenhouse gas emissions. This plan earned the highest designation of Gold Level Reporter status for the second consecutive year.

A part of the community

In 2002, consistent with its mandate, the centre continued to play an active role in the community, working with a range of organizations. In November, the centre co-hosted the second annual Yukon Energy Fair with the Northern Climate ExChange, Yukon Development Corporation, and Yukon Energy.

More than 30 exhibitors showcased the latest energy-saving and renewable energy

technologies. The keynote speaker at the fair was Jay Ingram, author and host on the Discovery Channel. Staff of Science World B.C. were also on hand to perform practical, fun experiments that demonstrated various scientific properties for students.

The fair was held at the same time as the annual Yukon/Stikine Science Fair, co-sponsored by Innovators in the Schools, Yukon College and the territorial government.

Other public communication activities were conducted over the past year to boost the centre's profile and showcase local energy solutions and services, including career fairs in Whitehorse and Haines Junction.

The centre co-sponsored a series of Yukon energy solutions articles that appeared in the Yukon News in the fall and winter of 2002. These articles focused on local stories that described the consumer benefits of different energy efficiency and renewable technologies, and their relationship to combating climate change.

The centre also co-released two new energy publications, *PeoplePower* and *The Lure and Lore of Wood*. Other outreach activities included media interviews and the distribution of program brochures, progress updates on specific initiatives and news releases.

GREEN ENERGY: COMMERCIALLY VIABLE

From its opening day, the Energy Solutions Centre has developed many initiatives for commercial clients since they can usually recoup the cost of energy improvements faster than residential clients due to their larger scale.

Commercial Energy Management Program

The business community showed substantial interest in the Commercial Energy Management Program. Spurred in part by rising fuel prices over the last three years, more than 60 applications were received over the life of the program.

This program helped to reduce energy demand by providing technical audits that produced recommendations for practical, integrated solutions to save money. Audits were conducted for more than 50 Yukon businesses and municipalities, and participants were offered financial incentives for equipment and lighting upgrades as well as advice on energy performance contracting.

In 2002, the program received six applications for audits, and the program was phased out at year-end.

Renewable Power Sales Incentive Program

Since it was first introduced by Yukon Development Corporation in March 2001, the Renewable Power Sales Incentive Program has attracted clients. By making it easier for both commercial and government customers to install electric boilers, this program promotes the use of surplus, renewable hydroelectricity for heating.

To date, electric boilers have been installed in 10 buildings. Technical audits were conducted on each of the buildings and clients received engineering advice.

These clients can now use surplus power for heating whenever it is available on the Whitehorse-Aishihik-Faro grid. The discount rate for the surplus power is lower than the price of either propane or stove oil. As there are no major or new industrial customers on the horizon, surplus hydroelectricity will be available for the foreseeable future.

Private sector clients can recoup the capital costs of the electric boilers through a lease arrangement. In February 2002, the first energy lease application for a private sector office building was approved. Longer leases are possible for public sector buildings since there is less financial risk involved with these clients.

The centre continues its efforts to remove financial barriers that make it difficult for government departments to use this program for retrofit applications. Through a Memorandum of Understanding, the Renewable Power Sales Incentive Program also targets the tourism and hospitality sectors.

Individual clients save money and use fewer fossil fuels, which helps to reduce greenhouse gas emissions. But other consumers also benefit from an expanding demand for surplus power as it increases utility revenues and decreases the pressure for electrical rate hikes.

Renewable Energy Deployment Initiative (REDI)

Natural Resource Canada's REDI Program, brokered by the centre, makes it easier for clients to choose renewable energy options. Under this program, clients can receive 40% rebates, up to a maximum of $80,000, on the cost of solar heating technologies such as solarwalls. Interest in this program is expected to increase as existing projects prove the value of renewable energy technologies.

Heat from the sun

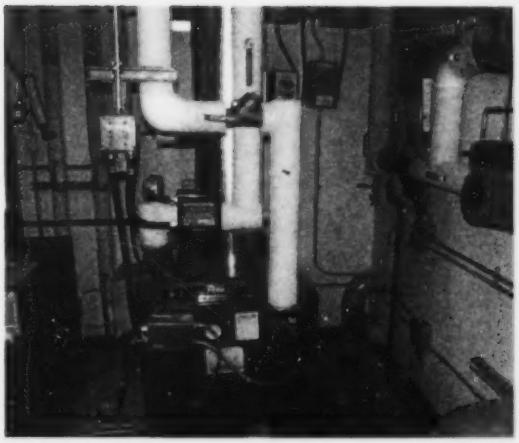
Solarwall technology has been promoted for the new multiplex facility and a demonstration installation is planned for early spring 2003 on the Energy Solutions Centre office building. Retrofit applications have also been investigated for a number of buildings, but are proving to be more difficult because of the requirement for changes to the existing ductwork and other systems.

Heat from the earth

Both private and public sector interest in geothermal heat pumps is high, and there are numerous potential uses for this technology. These pumps extract geothermal heat from water or a glycol solution, intensify the heat and deliver it through an exchanger to a heating system using either heat or forced air. Since heat is transferred rather than produced, a ground source heat pump can deliver up to four units of energy for every unit it consumes by using relatively constant, underground temperatures.

The Whitehorse Rapids Fish Hatchery is now being heated with geothermal heat pumps. Resource assessment and technical feasibility are being investigated to determine if a public school in Whitehorse could also tap into geothermal heat.

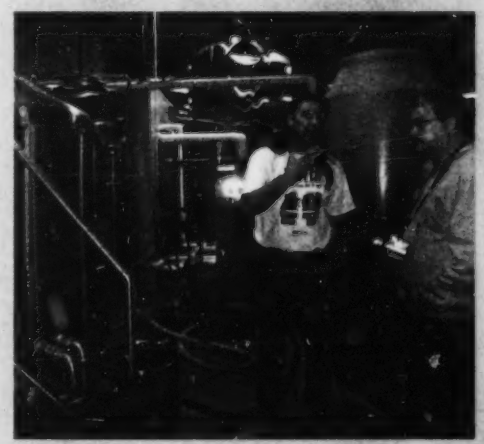
A major warm water artesian aquifer was discovered under the Village of Haines Junction in the fall and the municipality formed a partnership with the centre to promote the



Yukon Brewing

Old and new technologies sit side by side at the Yukon Brewing Company in Whitehorse. The old fuel oil boiler is enclosed in a small room with soot-covered walls, while the new electric boiler, located only steps away, sits out in the open in the brewing room.

Bob Baxter, the president of Yukon Brewing, says the quiet electric boiler is perfect for their operation and is much easier to maintain than the old boiler which broke down regularly.



The brewing business is a good fit for the Renewable Power Sales Incentive Program as it is busiest in the summer when plenty of surplus hydropower is available. Also, the brewery's demand for electricity will grow in line with its success. If more beer is brewed, more electricity will be needed, and the brewery will realize even greater savings on its energy bills.

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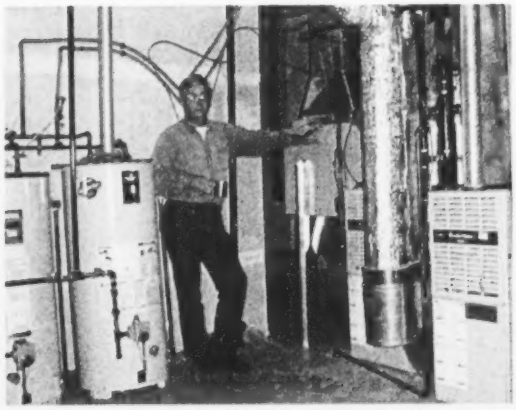


use of geothermal technology. Funding for the project is currently being pursued from a number of sources.

The Energy Solutions Centre is also actively supporting Yukon Development Corporation's participation on behalf of the territory in the new Canadian Geo-exchange Consortium developed by the Canadian Electricity Association. This national initiative will allow the centre to exchange valuable knowledge with other jurisdictions and provide access to funding, training and other resources that promote earth energy systems.

Commercial Building Incentive Program (CBIP)

This National Resources Canada program offers building owners and developers a financial incentive to incorporate energy efficient features into the design of new commercial and institutional buildings.

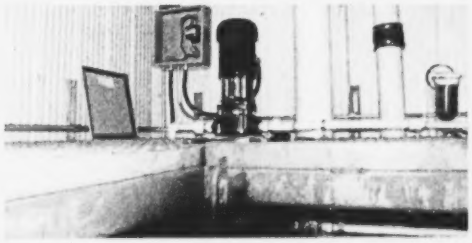
The centre continues to encourage private sector developers to apply to the CBIP program for their projects. The owners of a new Whitehorse restaurant are currently building their facility to CBIP requirements. Construction is to be completed in early summer, 2003.

Energy Innovators Program

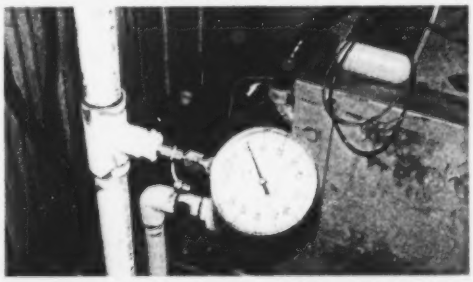
In partnership with the tourism sector, the centre is looking for ways to enable Yukon businesses to qualify for the federal Energy Innovators Program which helps to improve the

Fish hatchery

For years the Whitehorse Rapids Fish Hatchery has been filling its fish tanks with warm groundwater from the aquifer lying beneath the Riverdale subdivision. Now this same resource is heating the hatchery building. After installing a ground source heat pump, the hatchery was able to turn off its propane heaters and tap into a renewable form of energy that literally lies underfoot.



Two systems are used with geothermal heat pumps. The hatchery is using the open loop system which taps the heat directly from warm water aquifers. In closed loop systems, plastic tubes are buried in the ground, and a solution containing antifreeze circulates through the system and absorbs heat from the ground.



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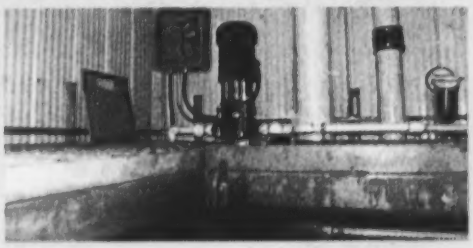

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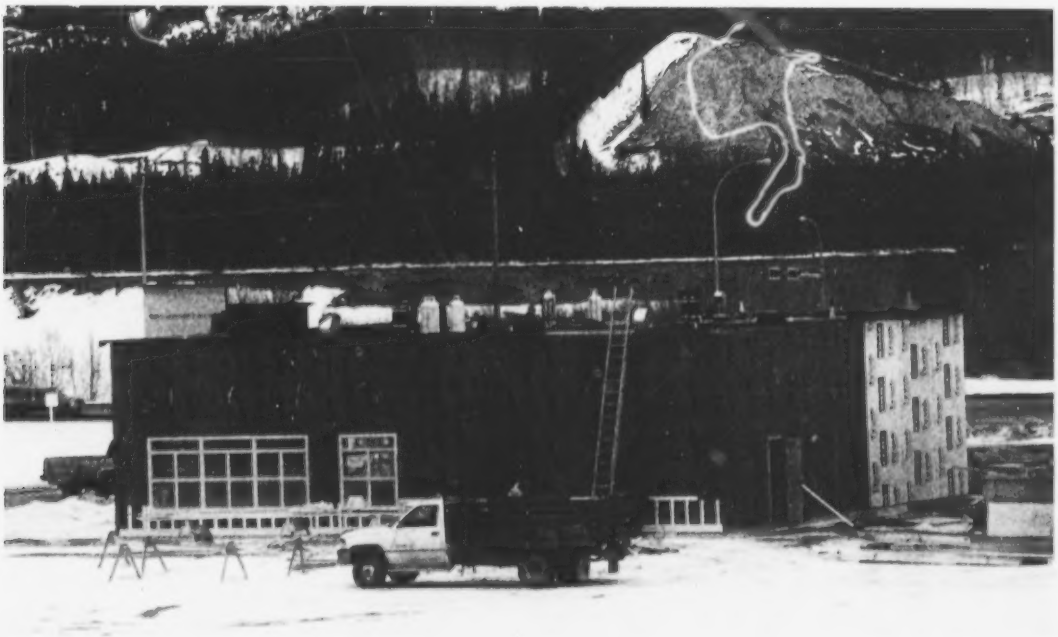


energy efficiency of existing buildings. Even though Natural Resources Canada had amended the funding criteria, most local companies could not meet them. Late in 2002, a solution was found to facilitate more effective territorial participation.

Tourism Energy Solutions Partnership

A Memorandum of Understanding was signed in March 2001 with the Tourism Industry Association of the Yukon, Yukon zone of the British Columbia and Yukon Hotels' Association, Hotel Association of Canada, Tourism Yukon, Natural Resources Canada and Yukon Development Corporation.

Participants receive comprehensive technical assessments of their facilities and operating systems to identify energy saving opportunities. An energy action business plan outlines appropriate, cost-effective efficiency and renewable energy solutions and provides one-window access to available federal and territorial government energy programs. The centre's costs are recovered as a fee-for-service, financed by the savings from solutions implemented by the client.

During the second year of the Tourism Energy Solutions Partnership, audits were conducted on a number of buildings. This action-oriented strategy targets energy solutions for the tourism and hospitality sector.

Major hotels in Whitehorse, Watson Lake, Dawson City, Beaver Creek and other communities have participated in the partnership and other Yukon visitor accommodation facilities have expressed substantial interest.

In 2003, the centre will issue a call for proposals from consulting engineers for a 24-hour, web-based building energy management system that can be used to monitor buildings from a central location.

Sample buildings in Whitehorse, Dawson City, Watson Lake and Teslin have been studied to determine the feasibility of such a service, and the conclusion was that cost-savings of up to 40% might be achievable.

First Nation Energy Management Service

In 2002, the Energy Solutions Centre continued to offer the First Nation Energy Management Service to help Yukon's aboriginal communities develop and implement local energy initiatives.

There are substantial opportunities to improve the energy performance of First Nation building stock, and thereby lower operating costs and reduce greenhouse gas emissions. There is also a need to identify and assess the long-term potential of renewable energy sources in or near aboriginal communities that depend on diesel-generated electricity.

This service recognizes that tackling these challenges means respecting the cultural differences and way of life within each aboriginal community. For this reason, the centre has contracted a First Nation energy technician to promote, design, coordinate and facilitate the

delivery of integrated energy solutions. This service helps to enhance local technical capacity over time with a goal of improving building energy management, and increasing the uptake of federal and territorial energy programs by First Nation communities. It is hoped that these activities will also lead to joint energy ventures between aboriginal and other governments, as well as the private sector.

Some of the community initiatives in 2002 included:

Carcross/Tagish First Nation

- Provided technical advice on a planned new hotel development with particular attention placed on infrastructure development and site servicing.
- Contributed to a preliminary planning meeting on a proposed new recreation centre.

Little Salmon/Carmacks First Nation

- Assisted with the plans for a proposed new commercial greenhouse.

Champagne and Aishihik First Nations

- Installed a community wind monitoring station at Aishihik in cooperation with the First Nation.

White River First Nation

- Discussed available energy programs and demonstrated the potential energy savings for the First Nation office building.

Northern Tutchone Council

- Collaborated on the design of a community-based pilot project for Mayo, Pelly Crossing and Carmacks.
- Contributed to a multi-year funding proposal to the National Aboriginal and Northern Climate Change Program to assist the Northern Tutchone Council with further energy efficiency initiatives.

First Nation of Nacho Nyak Dun

- Contributed to discussions with the First Nations development corporation to help plan a proposed office development and cultural centre.

Green by design

The best way to improve the energy efficiency of buildings is to design and construct them with this goal as a priority. In 2002, the centre added an experienced professional architect to its team to promote the green building program to developers.

This initiative promotes the economic and environmental benefits of green or high performance structures, and encourages local architects, engineers and aligned professions to use a more comprehensive approach to achieve green building design.

The centre assisted a number of clients over the past year, including eight commercial facilities, four light industrial structures, eight new institutional buildings, and a proposed subdivision.

Perhaps the most notable project was a new Whitehorse restaurant being developed by a national franchise. It is expected to meet the criteria of the federal Commercial Building Incentive Program. To date, the Yukon Energy offices and the J.V. Clark School in Mayo are the only other buildings in the territory that meet these standards.

The Energy Solutions Centre also worked with private sector developers to improve the energy efficiency of several new Whitehorse buildings, including a car dealership expected to open in 2003, and a new theatre complex. The athlete's village for the Canada Winter Games presents an excellent opportunity to promote green building design, and the centre expects to participate actively in the development of this complex.

The centre also commissioned a study on energy performance of new buildings, using a representative sample of buildings constructed over the last 10 years. Early indications show that these facilities are performing poorly, with few exceptions. The study is scheduled for completion by the summer of 2003 and will be used to determine the need for energy performance standards for commercial buildings in the Yukon.

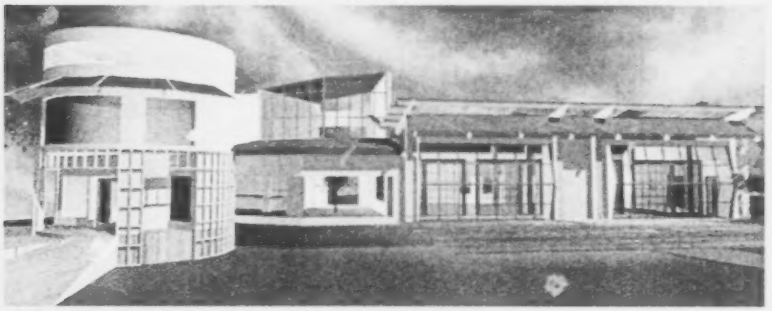
BUILDING THE ARTS, BUILDING GREEN

In 2002, three Yukon design teams took on the challenge of the Green Building Design Competition by submitting designs for a visual arts education centre adjacent to the Yukon Arts Centre. Co-sponsored by the Energy Solutions Centre and the Yukon Arts Centre, the competition set tough building performance criteria aimed at producing a leading-edge green building.

The competition helped to highlight the advantages of the integrated design process in which all of the members of a building design team work together from the outset of a project. It is hoped that Yukon architects, engineers and builders will begin to make this kind of work process routine. The jury recognized the outstanding achievement of each submission in different categories with awards presented for technical integration, artistic merit and analytical interpretation of green architecture.

The overall goal of the competition was to transform the local market and encourage governments, developers and the construction industry to consider the long-term operational costs of a facility, not simply the initial capital expense.

To help with the educational goals, a community workshop, technical workshops, and a series of newspaper articles occurred in conjunction with the design competition.



Ferguson Simek Clark

Award for best technically integrated interpretation of green architecture

Kobayashi + Zedda Design Group

Award for best artistic interpretation of green architecture

Sinclair and Associates

Award for best analytical interpretation of green architecture

PUBLIC SPACES: SHOWCASING THE POSSIBILITIES

Since public buildings tend to be medium to large in size, they typically offer significant opportunities for energy savings. They can also serve to highlight the many benefits of energy efficiency and renewable energy technologies.

Another advantage of working with the public sector is that governments and related agencies may be more amenable to using emerging energy technologies because, for them, the financial risk is less material than it would be for smaller, private businesses.

Over the last five years, the Yukon government has committed substantial resources to meet objectives in the areas of green power and building energy management. The Energy Solutions Centre has assisted with these efforts by using its technical expertise to identify energy-saving opportunities and to facilitate practical responses grounded in sound business cases.

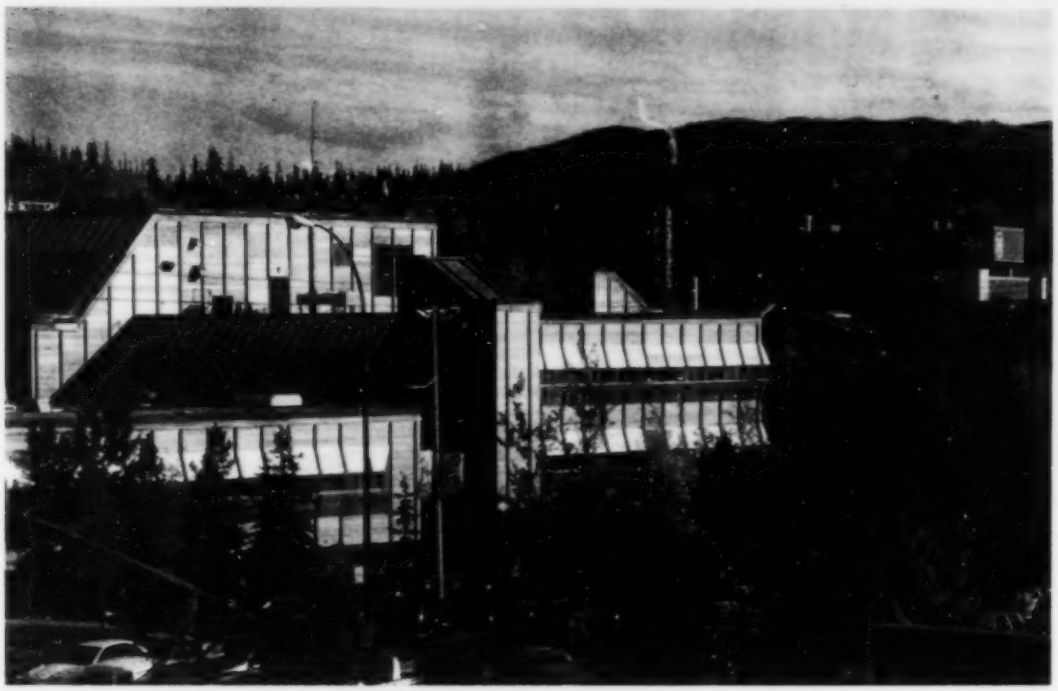
Whitehorse General Hospital

Clean, reliable energy is vital for hospitals, and many options have been explored for making the Whitehorse hospital a showcase for energy efficiency and renewable energy.

In 2003, an electric boiler will be installed to utilize surplus hydroelectric power and save the hospital substantial amounts of money on operating costs. Technical studies were also conducted on the feasibility of constructing a solar wall, improving the efficiency of the heat recovery system, converting the domestic hot water system to solar heat, and installing heat pumps for the building's chiller.

Energy consumption database

The centre is completing a Public Buildings Energy Consumption Database in partnership with federal, territorial and local governments. Baseline information on electricity and heating fuel consumption will help in the development of viable solutions involving energy efficiency and renewable energy for individual facilities. The data will also allow changes in energy performance to be measured.



ENERGY MATTERS AT HOME

In the residential sector, the Energy Solutions Centre tackled a range of initiatives in 2002 focusing on household technologies and consumer choice. As a result, there are more energy efficient refrigerators in Yukon kitchens, and Yukoners are upgrading their wood-heating systems or using their existing systems more efficiently.

Fridge Exchange Program

In 2002, more than 70 Yukon households switched to new ENERGY STAR® labelled refrigerators through the fridge exchange pilot project. This program offered incentives to replace old refrigerators with new, energy efficient models, and ensured that the old appliances were properly decommissioned and recycled. In communities relying on diesel-generated electricity, consumers received a $200 rebate if they purchased a new ENERGY STAR® fridge. They also got free delivery and removal of the old appliance. People residing in hydroelectric zones had their old fridges removed and recycled for free.

Refrigerators that exceed government energy efficiency standards by at least 10% are labelled with the ENERGY STAR® logo. Some of the refrigerators being sold today consume about one-third of the energy used by a comparable model manufactured in the 1980s. These energy efficient models save money and reduce the amount of greenhouse gasses released to the atmosphere.

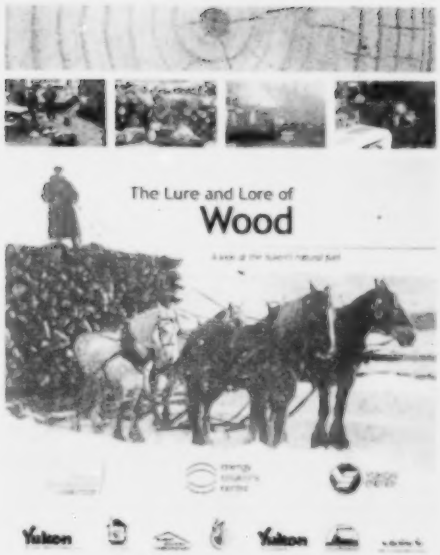
The pilot project has been extended for another year, and is being considered as a program template by other Canadian jurisdictions. In fact, the centre will be a major presenter at the ENERGY STAR® conference to be held in Ontario in 2003.

Efficiency Appliance Initiative

The Fridge Exchange Program is only one part of Yukon Development Corporation's Energy Efficiency Appliance Initiative. Local appliance retailers and service personnel also benefit from this initiative by receiving training in EnerGuide labelling and ENERGY STAR® programs and learning about the market advantages of keeping these appliances in stock.

Companies that completed the training and agreed to promote ENERGY STAR® labelled appliances were eligible for financial incentives from the sale of energy efficient refrigerators under the Fridge Exchange Program. Yukon retailers enthusiastically supported the program and, as a result, ENERGY STAR® labelled appliances are more readily available on showroom floors in the Yukon.

In collaboration with Yukon Housing Corporation and local contractors, the final component of this program is a pilot project to incorporate an appliance section to the existing EnerGuide for Houses audits. The collection of baseline data on the age and use of household appliances will better define the local market and help design future energy initiatives.



Burn It Smart

Many Yukoners burn wood to heat their homes and businesses, and the Energy Solutions Centre has worked hard to ensure that people know the right way to go about it. Starting in September 2002, sponsored by Yukon Development Corporation and Natural Resources Canada, the Yukon Burn It Smart project and the Yukon Conservation Society ran a series of 24 public workshops, newspaper articles and other forums to encourage people to upgrade their existing wood heating systems to low-emission woodstoves.

Not only do these stoves keep the air cleaner, they also cost less to operate. Stoves certified by the US Environmental Protection Agency, which is recognized in Canada, produce up to 90% less smoke and use up to one-third less wood than conventional units.

Through this project, Wood Energy Technology Training (WETT) courses were offered, enabling participants to become WETT-certified

chimney sweeps, woodstove installers or woodstove retailers. A "burn trailer," equipped with both an EPA-certified stove and an older model, was taken to courses and public venues to demonstrate proper burning techniques and the benefits of an efficient stove.

Other supporters and partners for the project included the Yukon Department of Environment, Yukon Public Safety, Yukon Housing Corporation, the City of Whitehorse, Wood Energy Technicians of British Columbia, and Pacific Energy Manufacturing.

The air we breathe

Canadians spend about 90% of their time indoors, where the air may be less than pristine.

Problems with indoor air quality have grown with efforts to make our buildings more energy efficient. Air quality is recognized as one of the leading issues in building science today since poor indoor air quality in the home can cause asthma, allergies and other health concerns.

The centre worked with Yukon Housing Corporation on a public awareness program to educate people on how to improve indoor air quality and mitigate the potential human health effects of tightly sealed buildings. For this reason, one- and three-day courses on indoor air quality were offered in November.

P-TRAK

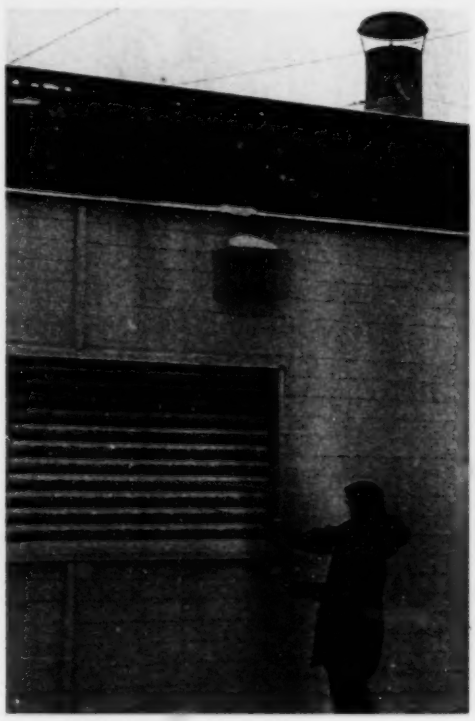
The P-TRAK is a powerful tool for tracking down indoor air quality problems.

Only on the market for a few years, it is the first portable instrument capable of measuring ultrafine particles in buildings.

Ultrafine particles are tiny bits of matter that make up about 95% of the particles in the air that we breathe. While fine particles like soot and dust can be seen in a shaft of sunlight, ultrafines are 300 times smaller than the tiniest particle visible to the naked eye, and can be as minute as the size of a virus.

With the P-TRAK, many indoor air quality problems can be tracked to their source. The device is also generating more research on ultrafine particles, and the evidence indicates that these very small particles can contribute to asthma, eye irritation, and respiratory and cardiovascular diseases.

Most ultrafine particles are the by-products of combustion. Furnaces, boilers, attached garages, photocopy machines and printers are some of the most common sources of these minute particles. Other contributors include propane stove burners and poorly vented gas fireplaces.



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Furnaces: taking a closer look

Residential furnaces can cause major problems in people's homes. Not only do they waste energy if improperly or irregularly serviced but they can be the main source of indoor air quality problems.

The Energy Solutions Centre is working to determine the most common problems with furnaces, and to find a way to ensure they are properly maintained. One solution is to develop appropriate training programs for local trades and a Yukon Gold Standard inspection service tool for consumers. In 2003, a pilot furnace inspection project will be conducted in Watson Lake.

NEW TOOLS AND TRAINING

Advances in any field depend upon sufficient technical capacity, and the Energy Solutions Centre recognizes the need for a large pool of trained people to help transform the territorial energy sector.

In 2002, the centre offered courses that introduced new energy efficiency and renewable energy technologies to the Yukon, and thereby improved the capability of the private sector to design and install these integrated energy solutions.

Courses were developed and delivered to meet specific market needs, develop skills within a particular field, or complement other initiatives of the centre. Architects, engineers, building and environmental regulators, facility owners, contractors, and appliance and energy technology retailers, as well as tradespeople, all benefited from the hands-on training, which enhanced their marketability and competitiveness.

The centre ensured that all training resulted in certification recognized nationally or by a

specific industry. This means that consumers can rely on a significant level of expertise from their serviceperson.

In addition to indoor air quality and infrared thermography training, efforts were made to improve the trade knowledge of solar water and photovoltaic systems. Formal training in these areas is scheduled for 2003.

Indoor air quality

In partnership with Yukon Housing Corporation, workshops on indoor air quality were offered in 2002. Heating and ventilation contractors, building and real estate managers and owners, health and safety professionals, and environmental and medical practitioners learned to measure and locate the source of indoor air quality problems using a special tool called the P-TRAK Ultrafine Particulate Counter, introduced to the Yukon by the centre.

In November 2002, a two-hour course to provide an introduction to air quality testing was offered. This was followed by a one-day course on ultrafine particle testing to find air quality problems. Graduates received credit from the American Board of Industrial Hygienists, and can rent the particulate counter from the centre to conduct testing.

Infrared thermography

In 2002, a select group of professionals participated in a Level 2 training program for thermographic imaging. The Yukon now has three Level 2 infrared technicians, as well as a number of Level 1 technicians who received training in 2001.

The course was ideal for energy auditors, building designers and contractors, inspectors and technical staff of the electrical utilities. The training can be applied to a wide variety of uses, including detecting voids in building insulation, detecting electrical overheating, conducting roof moisture surveys, and finding leaking valves and radiant heating leaks.

Participants who obtained certification can rent the infrared camera from the centre.

Professional development for Yukon engineers

As part of a three-year cooperation agreement with Yukon Development Corporation, in 2002, the Association of Professional Engineers of Yukon (APEY) offered eight different courses on issues related to sustainable energy. Assistance with travel and accommodation costs for training outside the territory was also approved for 12 of 14 applications.

This agreement is enhancing professional capacity in the local market and will help to facilitate the implementation of more innovative, integrated energy solutions.

Commercial Energy Auditor Service

Establishing a pool of qualified auditors is fundamental to the success of energy efficiency and renewable energy programs. Through the Commercial Energy Auditor Service, the centre helps train and certify local commercial energy auditors based on the curriculum of the Canadian Institute for Energy Training program. This initiative was created in 2000 by Yukon Development Corporation, Yukon Energy and Yukon Housing Corporation.

Audits provide essential baseline information, critical in developing appropriate, affordable integrated energy solutions. Since the inception of the service, 14 people have qualified as commercial energy auditors.

In addition, the centre uses a consortium of Yukon architects and mechanical and electrical engineering firms to audit more specialized projects.

Weather database

All northerners know the importance of good weather information. Long-term climate data is particularly important to engineers who are planning new buildings. They need the numbers when designing heating and ventilation systems, and need accurate information on temperatures to calculate the necessary heating and cooling loads in buildings.

In the past, this data for Yukon communities other than Whitehorse has not been readily available, which meant that engineers had to wade through years of climate information or make a best guess using data from Whitehorse or larger centres such as Edmonton.

This approach often led to heating systems that were either over- or under-designed for their location. And poorly designed systems lead to wasted energy, and buildings that are not as comfortable for occupants.

Because the centre consolidated 30 years of climate data for Yukon communities, engineers can now easily use the data when doing appropriate northern design. This information is available on a compact CD, free of charge from the centre.

NEW DIRECTIONS FOR A NEW YEAR

Over the coming year, the Energy Solutions Centre will target new sectors of the Yukon energy market. In partnership with Natural Resources Canada, off-grid applications for renewable energy will be studied for both residential and small and medium-sized business use.

The study will lead to a design charette for renewable energy technologies to be held in Whitehorse in November 2003 during Energy Month. This applied research and development project will lead to the development of national standards for off-grid renewable energy applications.

The centre will assess the effectiveness of current pilot projects for the residential sector and may proceed with new measures in 2003. In response to private sector initiatives, collaborative research continues into the role of appropriate building, appliance and energy regulations for the northern environment, and their ability to provide cost-savings, reduce greenhouse gas emissions and build a competitive economy.

Efforts will continue to lower operating costs by optimizing efficiency and using renewable energy alternatives for new and existing buildings in private, non-government, municipal, First Nation and public government sectors. Clients will be encouraged to incorporate green building design concepts from the onset and to support prudent planning and life cycle costing for northern conditions.

Anticipated improvements in regional program delivery with Natural Resources Canada will help to promote the financial and technical assistance available through federal initiatives such as the Commercial Building Incentive Program, Renewable Energy Deployment Initiative, and Energy Innovators Program.

The centre will also target local governments for integrated energy solutions through a multi-year agreement. Similar to the arrangement with the tourism industry, the partnership will facilitate comprehensive energy audits for municipal infrastructure to assess the potential for cost-effective upgrades that improve energy efficiency and use renewable energy sources. The agreement will enable local governments to implement integrated solutions and lever financial assistance from federal and territorial energy programs.

In the area of public education, the centre received support from Canada's Climate Change Action Fund to develop and distribute climate change information focusing on energy solutions. The main product will be a practical handbook providing information and highlighting incentives to show how residential consumers can reduce direct and indirect sources of greenhouse gas emissions.

Climate change facts and figures, along with vouchers and coupons for locally available energy services and products, will help consumers to make the connection between daily household activities and greenhouse gas emissions.

Success through superior performance

The Yukon's efforts in the energy management field continued to increase notably in 2002. The scope and volume of its activity, coupled with effective partnerships with the public and private sectors, led to a series of practical energy solutions with tangible, measurable outcomes.

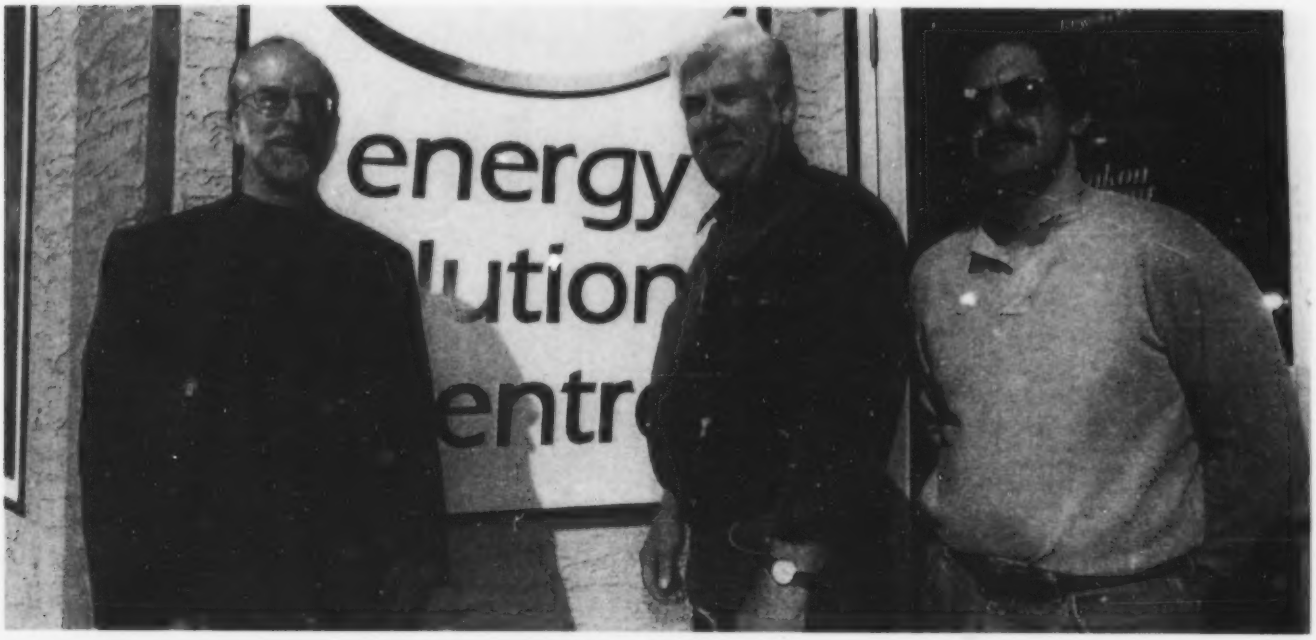
The success of the regional partnership model adopted by Natural Resources Canada and the Yukon government has helped establish the territory as a recognized leader in efficiency and renewable energy programs and, increasingly, as a possible delivery template for other territories and provinces.

The Energy Solutions Centre is strongly committed to sustaining this level of excellence. Its efforts to identify, develop and implement integrated energy solutions for the benefit of residential, commercial, industrial and government consumers will be ongoing and will continue to be delivered primarily by the Yukon private sector.

The centre plans to expand its role as the catalyst for shifting market demand to energy efficiency and renewable solutions so these technologies become standard options.

The opportunities are limited only by imagination and resolve.

Detailed Design Opportunities



BOARD OF DIRECTORS
& staff

Energy Solutions Centre Inc.
206A Lowe Street, Whitehorse, Yukon Y1A 1W6
phone: (867) 393-7063, fax: (867) 393-7061
e-mail: info@nrgsc.yk.ca, website: www.nrgsc.yk.ca

Board of Directors
Martin Allen
Fred Blanchard
Carl Charlie
Duncan Sinclair

Officers
President
Duncan Sinclair

Managing Director
Don Flinn

Treasurer
Collin Young

Corporate Secretary
Rod Snow

Assistant Corporate Secretary
Darlene Morgan

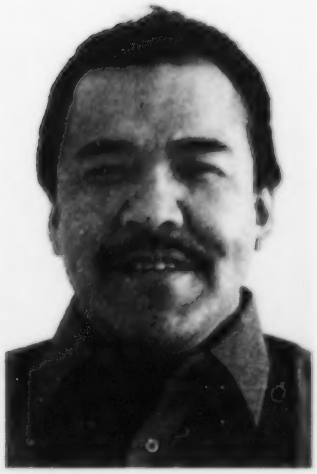
Auditor
KPMG LLP Chartered Accountants

Martin Allen, Director

Mr. Allen is the owner of L & T Holdings, a Yukon electrical business. He resides in Whitehorse and has worked in the Yukon in the electrical field for over 30 years both in the commercial and private sector. He was appointed to the board in August 2002.

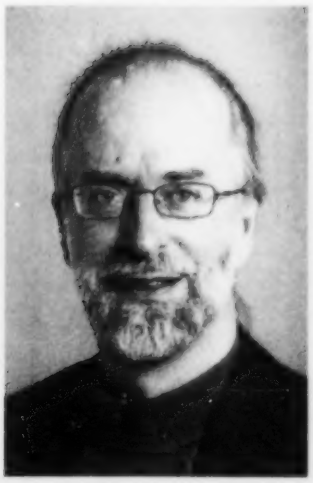
Fred Blanchard, Director

Mr. Blanchard is a member of the Little Salmon/ Carmacks First Nation and plays an important role in promoting energy efficiency programs within Whitehorse and the rural communities. He has been on the board since August 1993.



Carl Charlie, Director

Mr. Charlie was appointed to the board of directors in October 1999. He is a member and former councillor of the Vuntut Gwitchin First Nation, and has extensive experience in land use planning and a strong interest in assisting First Nation communities achieve greater energy sustainability and independence.

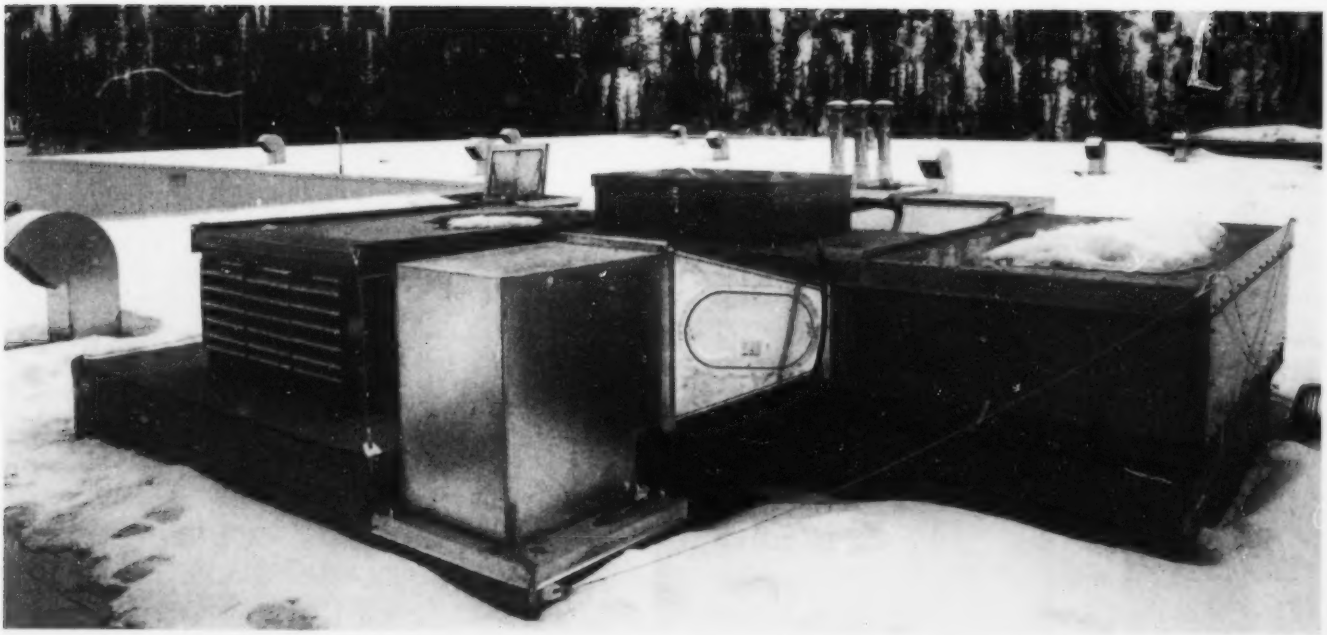


Duncan Sinclair, Director

Mr. Sinclair is Chief Executive Officer for Yukon Development Corporation. He is also president of the Energy Solutions Centre Inc.

Don Flinn P.Eng, Managing Director

Past president of the Association of Professional Engineers of Yukon, Mr. Flinn offers over 30 years of engineering experience to the centre and its activities in support of private and public sector clients throughout the territory.



AUDITED FINANCIAL
statements

KPMG LLP
Chartered Accountants
200 – 206 Seymour Street
Kamloops BC V2C 6P5
Canada

Telephone (250) 372-5581
Telefax (250) 828-2928
www.kpmg.ca

AUDITORS' REPORT

To the Shareholder of
Energy Solutions Centre Inc.

We have audited the balance sheet of Energy Solutions Centre Inc. as at December 31, 2002 and the statements of earnings and retained earnings and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2002 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

KPMG LLP

Chartered Accountants

Kamloops, Canada
March 25, 2003

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Energy Solutions Centre Inc.
BALANCE SHEET

December 31, 2002, with comparative figures for 2001

	2002	2001
ASSETS		
Current assets		
Cash	$ –	$ 463
Accounts receivable	91,633	9,875
Work in process	118,832	–
Prepaid expenses	1,560	
Current portion of leases receivable (note 2)	10,058	–
	222,083	**10,338**
Leases receivable (note 2)	15,668	–
Advances to (from) related parties (note 3)	60,196	137,819
Capital assets (note 4)	132,601	104,362
	$ 430,548	**$ 252,519**
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current liabilities		
Cheques issued in excess of funds on deposit	52,789	–
Accounts payable and accrued liabilities	155,481	78,193
	208,270	**78,193**
Deferred capital revenue	84,240	95,718
Shareholder's equity		
Share capital (note 5)	100	100
Retained earnings	137,938	78,508
	138,038	**78,608**
	$ 430,548	**$ 252,519**

See accompanying notes to financial statements.

On behalf of the Board:

Director

Director

Energy Solutions Centre Inc.
STATEMENT OF EARNINGS AND RETAINED EARNINGS

Year ended December 31, 2002, with comparative figures for 2001

	2002	2001
Revenue		
Program delivery	$ 1,452,227	$ 701,090
Finance income	1,816	–
Course fees and equipment rental	58,938	26,276
Yukon International Wind Conference	16,771	–
Amortization of deferred capital revenue	11,478	8,393
	1,541,230	**735,759**
Expenses		
Advertising and promotion	41,259	9,070
Amortization	20,482	8,393
Board	4,714	1,589
Consulting fees	1,002,942	385,529
Equipment rental	15,405	–
Grants	46,467	8,826
Office and general	50,724	24,022
Professional fees	11,736	16,039
Rent	59,037	34,049
Telephone	9,323	4,308
Training courses	13,152	36,252
Travel	58,339	35,328
Vehicle operation	2,481	–
Wages and benefits	123,677	93,846
Yukon International Wind Conference	22,062	–
	1,481,800	**657,251**
Net earnings	59,430	78,508
Retained earnings, beginning of year	78,508	–
Retained earnings, end of year	**$ 137,938**	**$ 78,508**

See accompanying notes to financial statements.

Energy Solutions Centre Inc.
STATEMENT OF CASH FLOW

Year ended December 31, 2002, with comparative figures for 2001

	2002	2001
Cash flows from operating activities		
Cash received from customers	$ 1,408,972	$ 725,884
Cash paid to suppliers and employees	(1,479,257)	(570,265)
Interest received (paid)	1,566	(400)
	(68,719)	**155,219**
Cash flows from financing activities		
Increase in deferred capital revenue	–	95,718
Proceeds from issue of share capital	–	100
	–	**95,818**
Cash flows from investing activities		
Increase (decrease) in advances to related parties	64,188	(137,819)
Purchases of capital assets	(48,721)	(112,755)
	15,467	**(250,574)**
Increase (decrease) in cash	(53,252)	463
Cash, beginning of year	463	–
Cash (cheques issued in excess of funds on deposit), end of year	**$ (52,789)**	**$ 463**

See accompanying notes to financial statements.

Energy Solutions Centre
NOTES TO FINANCIAL STATEMENTS
Year ended December 31, 2002

Energy Solutions Centre Inc. (the "Company") is incorporated under the laws of the Yukon Territory and is a wholly owned crown corporation engaged in promoting the potential of energy efficiency and green power as a solution to climate change by providing services to implement projects that will reduce greenhouse gas emissions and reduce energy costs in the Yukon.

1. SIGNIFICANT ACCOUNTING POLICIES

(a) Financial instruments

The Company's financial instruments consist of accounts receivable, leases receivable, advances to related parties, cheques issued in excess of funds on deposit, accounts payable and accrued liabilities, and long-term debt. Unless otherwise noted, it is management's opinion that the Company is not exposed to significant interest, currency or credit risks arising from these financial instruments. Due to their nature, the fair values of these financial instruments approximate their carrying values.

(b) Work-in-progress

Work-in-progress is valued at the lower of cost and net realizable value.

(c) Capital assets

Capital assets are stated at cost. Amortization is provided on the straight-line basis at the following annual rates which approximate the useful life of the assets:

Asset	Rate
Alternative energy equipment	11%
Automotive	30%
Computer hardware	20%
Computer software	15%
Furniture and fixtures	7%

One half the annual rate of amortization is provided for in the year of acquisition.

(d) Revenue recognition

Revenue derived from program delivery is recognized when services are provided.

Finance income derived from leasing contracts entered into with customers is deferred and recognized over the term of the lease.

Government assistance related to capital asset acquisitions is deferred and amortized on the same basis as the related capital assets.

1. **SIGNIFICANT ACCOUNTING POLICIES (continued)**

(e) Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the year. Actual results could differ from those estimates.

(f) Income taxes

The Company is not subject to federal or territorial income taxes by virtue of exemption under Section 149 (1) of the *Income Tax Act*.

2. LEASES RECEIVABLE

	2002	2001
Leases receivable to 2007 with interest rates ranging from 6.75% to 7.00%	$ 28,503	$ –
Less deferred finance income	(2,777)	–
	25,726	–
Current portion of leases receivable	10,058	–
	$ 15,668	**$ –**

3. ADVANCES TO (FROM) RELATED PARTIES

The amounts advanced to (from) related parties are non-interest bearing, unsecured and have no specified terms of repayment. At the end of the year, the advances to (from) related parties are as follows:

	2002	2001
Parent company	$ 126,090	$ 137,819
Sister company	(65,894)	–
	$ 60,196	**$ 137,819**

4. CAPITAL ASSETS

	Cost	Accumulated amortization	2002 Net book value	2001 Net book value
Alternative energy equipment	$ 3,088	$ 524	$ 2,564	$ 2,862
Automotive	31,435	1,363	30,072	–
Computer hardware	90,324	23,240	67,084	78,035
Computer software	11,197	2,183	9,014	10,167
Furniture and fixtures	25,432	1,565	23,867	13,298
	$ 161,476	**$ 28,875**	**$ 132,601**	**$ 104,362**

5. SHARE CAPITAL

	2002	2001
Authorized:		
Unlimited number of common shares, without par value		
Issued:		
1 common share	$ 100	$ 100
	$ 100	**$ 100**

6. ECONOMIC DEPENDENCE

Sales to Yukon Development Corporation, the parent corporation, represent 92% of the Company's total sales for the year ended December 31, 2002 (2001 – 96%).

7. RELATED PARTY TRANSACTIONS

The following summarizes the Company's related party transactions for the year:

	2002	2001
Revenue		
Services provided to:		
Parent company	$ 1,402,300	$ 701,100
Sister company	11,500	–
Consulting, general and administrative expenses		
Rent to parent corporation	59,000	34,000
Consulting and administrative expenses to sister company	36,500	–
Consulting, office, and administrative expenses to officers	241,300	13,400

These transactions are in the normal course of operations and are measured at the exchange amount which is the amount of consideration established and agreed to by the related parties.

PHOTOGRAPH CREDITS

Energy Solutions Centre 2002 Annual report

GL: Gartner Lee Ltd.
KZ: Kobayashi + Zedda Design Group
YG: Yukon government

CA: Cathie Archbould
CO: Craig Olsen
DM: Doug MacLean
JP: J-P Pinard

MB: Marten Berkman
PL: Peter Long
RW: Roxanne Wray
SB: Sandy Birrell

cover: installing wind testing apparatus at Old Crow (JP)

facing p.1: presenting award for best of fair project to winner (MB)

p.1: green building design competition workshop (MB)

p.2: heating system at Yukon Honda (PL)

p.3: wood chipper in Destruction Bay feeding district heating boiler (YG); residential heat pump (PL)

p.4: starting a new legacy; green buildings with efficient technologies (PL)

p.5: examining woodstove features (MB); retailers showing off ENERGY STAR® fridges (PL); R-2000 homes in Granger (PL); snow on duct work at Mount McIntyre (PL)

p.6: boiler at Whitehorse General Hospital (DM)

p.7: solar heating panel on Cook Street apartment (DM); Energy Solutions Centre office (CA)

p.8: demonstrating infrared thermography at the May 2002 Lions Trade Show (DM)

p.9: showing recycled door (PL); display at the energy fair (PL); classroom presentation on energy (SB)

p.10: Northern Climate Exchange display at 2002 energy/science fair (MB)

p.11: heating room at Yukon Energy administration building (PL); showing energy saving equipment at Yukon Brewery (PL)

p.12: ground source heat pump equipment (DM); ground source heat pump equipment at the fish hatchery (PL); Yukon Energy administration building (PL)

p.13: Ricky's All Day Grill under construction (PL); Westmark Hotel (PL)

p.14: youth at Champagne and Aishihik First Nations science camp (JP); preparing wind testing equipment at Aishihik (JP)

p.15: inside the new school in Mayo (KZ)

p.16: three entries for green building design competition: Ferguson Simek Clark, Kobayashi + Zedda Design Group, Sinclair and Associates

p.17: Yukon government building and Whitehorse General Hospital in background (PL)

p.18: loading ENERGY STAR® fridge for delivery to Old Crow (CA)

p.19: wood display at 2002 energy/science fair (PL)

p.20: P-TRAK and DustTRAK (DM); using P-TRAK to test air quality at Vanier School (DM)

p.21: cleaning a furnace (PL); workshop at green building design competition (DM)

p.22: demonstrating infrared thermography unit live at the 2002 energy/science fair (MB)

p.23: smoke over downtown Whitehorse (DM)

p.24: off-grid green home with solar power (PL); appliance retailer workshop (CO); architect at green building design competition workshop (MB)

p.25: House Calls in Old Crow (CA); Penguin timer (CA); testing for ground source heat feasibility at Yukon Honda site (GL)

p.26: engineers at green building design competition workshop (MB)

p.27: board of directors (missing: Carl Charlie) (CA)

p.28, 29: board of directors (CA, MB)

p.30: children enjoying the 2002 energy/science fair (MB)

p.31: heating and ventilation equipment on Yukon Honda building (PL)

Yukon's energy solutions group of companies

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